BEFORE THE

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Federal C	lommunicat	ions Commission	
	WASHINGTON, 1	D.C. 20554	EIVED - FCC
		A	PR 6 2004
In the Matter of	)	<b>Society</b> Co	mmunication Commission Bureau / Office
Amendment of Section 73.622(b), DTV Table of Allotments.	)	MM Docket No	and de 1
(Honolulu, Hawaiı)	ý	<del></del>	THECEIVED
Directed to: Chief, Media Bureau			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
ERRATUM TO	O PETITION	FOR RULE MAKING	Federal Communications Commission Office of the Secretary

Pacifica Broadcasting Company ("Pacifica"), licensee of noncommercial educational television station KALO(TV) and permittee of KALO-DT, by its attorneys, hereby respectfully submits its Erratum to its Petition for Rule Making submitted on April 2, 2004. With respect thereto, the following is stated:

As indicated above, on April 2, 2004, Pacifica submitted a Petition for Rule Making requesting that the Commission institute a rule making proceeding for the purpose of amending the DTV Table of Allotments to substitute digital channel \*10 for the current KALO-DT allotment on Channel \*39 at Honolulu, Hawaii. It appears, however, that the Engineering Statement referenced therein may have inadvertently been omitted from the Petition as filed. Accordingly, attached hereto is the Petition with the Engineering Statement attached.

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# Respectfully submitted,

## PACIFICA BROADCASTING COMPANY

By:

Harry F. Cole

Anne Goodwin Crump

FLETCHER, HEALD & HILDRETH, P.L.C. 1300 North 17th Street Eleventh Floor Arlington, Virginia 22209 (703) 812-0400

April 6, 2004

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#### BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)		
Amendment of Section 73.622(b),	)	MM Docket No.	
DTV Table of Allotments.	)	RM	
(Honolulu, Hawaiı)	)	<del></del>	

Directed to: Chief, Media Bureau

#### **PETITION FOR RULE MAKING**

Pacifica Broadcasting Company ("Pacifica"), licensee of noncommercial educational television station KALO(TV) and permittee of KALO-DT, by its attorneys, hereby respectfully requests that the Commission institute a rule making proceeding for the purpose of amending the DTV Table of Allotments to substitute digital channel \*10 for the current KALO-DT allotment on Channel \*39 at Honolulu, Hawaii. As set forth below, this substitution will serve the public interest by allowing KALO-DT to provide improved and maximized service to the public with reduced concerns stemming from adjacent channel interference. Accordingly, Pacifica proposes to amend Section 73.622(b) of the Commission's Rules as follows:

## Channel No.

<u>City</u> <u>Present</u> <u>Pre</u>	<b>Proposed</b>		
23, 27c, 31, 33c, 22,	*10, *18, 19, , 23, 27c, 31, c, 35, 40, *43		
33, "390, 40, "43 330	0, 33, 40, 143		

At the present time, the DTV facilities of KALO-DT are limited by the adjacent channel allotment of Channel 40 to KITV-DT, which is also licensed to Honolulu. As a result, the noncommercial educational service to be offered by KALO-DT upon grant of its DTV construction permit is restricted and cannot be maximized to its full potential. Thus, KALO-DT's viewing audience will similarly be limited, and a number of viewers in the market will be deprived of the opportunity to receive another noncommercial DTV service. Such a result would neither be an efficient use of the spectrum nor helpful in promoting the DTV transition.

In contrast, however, the proposed substitution of Channel \*10 would allow KALO-DT to maximize its service area. The resulting expansion in the potential service of the station would clearly serve the public interest. In addition, the change from a UHF channel to a VHF channel will lead to associated savings in operational costs, including significant reductions in the cost of power to operate the station. These cost savings are particularly critical for noncommercial stations such as KALO-DT, and the funds saved can be applied in other areas to advance service to the public with KALO-DT's digital facilities.

As demonstrated in the attached Engineering Statement of Smith and Fisher, the proposed channel substitution in accordance with the Commission's technical rules and policies and would not create any prohibited, objectionable interference.

Pacifica has previously submitted an application for construction permit for a DTV facility to operate on Channel \*39, BPEDT-20000501AFZ, which remains pending at this time.

In the event that the requested substitution is made, Pacifica will amend its pending application to specify Channel \*10. In the event that the now-pending application has been granted, Pacifica

will submit a new modification application to specify the substituted channel. Upon grant of the implementing application, Pacifica will construct the proposed facility in a timely manner.

WHEREFORE, the premises considered, Pacifica hereby respectfully requests that Section 73.622(b) of the Commission's Rules be amended to substitute Channel \*10 for Channel \*39c at Honolulu, Hawaii, and that Channel \*10 be assigned to KALO-DT.

Respectfully submitted,

PACIFICA BROADCASTING COMPANY

Bv:

Harry F. Cole

Anne Goodwin Crump

FLETCHER, HEALD & HILDRETH, P.L.C. 1300 North 17th Street Eleventh Floor Arlington, Virginia 22209 (703) 812-0400

April 2, 2004

#### ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of PACIFICA BROADCASTING COMPANY, licensee of Non-Commercial Television Station KALO(TV) in Honolulu, Hawaii, in support of its Petition for Rulemaking to substitute digital Channel 10 for the present KALO-DT allotment on Channel 39.

Due to significant interference concerns on DTV Channel 39 with respect to KiTV-DT (Channel 40 in Honolulu, Hawaii), KALO-DTcannot be properly maximized on its presently allotted channel. However, a detailed channel search and interference study reveals that DTV Channel 10 can be allotted to Honolulu from the present KALO site and with specific, maximized operating parameters.

For the purposes of our allotment and interference studies, we assumed that an Andrew ATW6V2-HSNC-10 directional antenna would be side-mounted on the present KALO tower at 21-23-45 N and 158-05-58 W. The proposed effective antenna height is 716 meters AMSL, and the main-lobe ERP is 25 kw. Proposed operating parameters are listed in Exhibit B, and Exhibit C provides the antenna radiation pattern data for the proposed antenna.

The predicted service contours are plotted in Exhibit D. As shown, the community of Honolulu is contained entirely within the requisite 43 dbµ contour. Exhibit E is a map upon which the proposed service contour of KPXO-DT, as authorized in BPCDT-19991022AAZ, is plotted in relation to that proposed herein. KPXO-DT is authorized to operate on Channel 41

#### **EXHIBIT A**

in Kaneohe, part of the same DMA as KALO-DT. Clearly, the KPXO-DT service area over land is greater than that of KALO-DT, as proposed. As a result, this proposal does not specify a facility that exceeds the coverage of the largest DTV station in the DMA.

Exhibit F is an interference study, which concludes that the proposed facility meets the requirements of §73.623(c)(2) of the Rules with respect to both NTSC and DTV facilities. A power density calculation is provided in Exhibit G.

Therefore, it is respectfully requested that the FCC substitute DTV Channel 10 for DTV Channel 39 in Honolulu, Hawaii, in its Digital Television Table of Allotments in §73.622(b) of the Rules as follows:

Community	Present Allotments	Proposed Allotments
Honolulu, Hawaii	8, *18, 19, 22, 23,	8, *10, 18*, 19, 22, 23,
	27c, 31, 33c, 35,	27c, 31, 33c, 35, 40, *43
	*39c, 40, *43	

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

**KEVIN T. FISHER** 

#### SMITH AND FISHER

#### **EXHIBIT B-1**

#### PROPOSED OPERATING PARAMETERS

#### PROPOSED KALO-DT ALLOTMENT CHANNEL 10 – HONOLULU, HAWAII

Channel Number: 10

Zone: 2

Site Coordinates: 21-23-45 N

158-05-58 W

Antenna Structure Registration Number: 1218023

Tower Site Elevation (AMSL): 695.1 meters

Overall Tower Height Above Ground: 60.6 meters

Overall Tower Height Above (AMSL): 755.7 meters

Radiation Center Above Ground: 20 meters

Radiation Center AMSL: 716 meters

Average Terrain Elevation (2-10 miles): 139 meters

Antenna Height Above

Average Terrain: 577 meters

Antenna Make and Model: Andrew

ATW6V2-HSNC-10

Orientation: Directional at 110° T

Electrical Beam Tilt: 0.5°

Polarization: Horizontal

Effective Radiated Power

(main-lobe, maximum): 25 kw

#### **EXHIBIT B-2**

#### PROPOSED OPERATING PARAMETERS

#### PROPOSED KALO-DT ALLOTMENT CHANNEL 10 – HONOLULU, HAWAII

Transmitter power output 1.95 kw
Transmission line loss 0.14 kw
Input to antenna 1.81 kw
Antenna gain (maximum) 13.80
Effective radiated power (maximum) 25 kw

Transmitter make and model: Type-accepted

Rated Power: 2 kw

Transmission line

Make and model: Andrew HJ8-50B

Size: 3"

Type: Air Heliax Length: 150 feet

Antenna

Make and model: Andrew ATW6V2-HSNC-10

Type: Directional @ 110° T

RCAGL 66 feet



ATW6V2H

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**Relative Field** 

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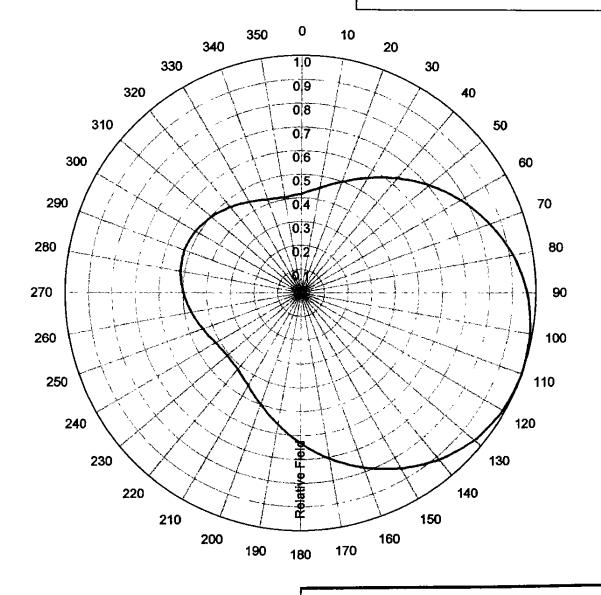
ANDREW CORPORATION 10500 W. 153rd Street Orland Park, Minois U.S.A 60462 **EXHIBIT C-1** 

**ANTENNA ELEVATION PATTERN** 

PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII



Type:	ATW-VHF-NC						
	Numeric	dBd					
Directivity:	2.30	3.62					
Peak(s) at:		<u> </u>					
Polarization: _	Hortze	ontal					
Channel: _		<u> </u>					
Location: _							
Note:							





ANDREW CORPORATION 10500 W. 163rd Street Orland Park, Illinois U.S.A 60462 EXHIBIT C-2

ANTENNA AZIMUTH PATTERN

PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII



Type: <u>ATW-VHF-NC</u>
Polarization: <u>Horizontal</u>

Angle	Field	ERP (kW)	ERP (dBk)
0	0.417	4.347	6.382
10	0.448	5 018	7.005
20	0.497	6.175	7.907
30	0.559	7.812	8.928
40	0.631	9.954	9.980
50	0.705	12 426	10.943
60	0.780	15.210	11.821
70	0.851	18.105	12.578
80	0.915	20.931	13.208
90	0.963	23.184	13.652
100	0.990	24.503	13.892
110	1 000	25.000	13.979
120	0.990	24.503	13.892
130	0.963	23.184	13.652
140	0.915	20.931	13.208
150	0.852	18.148	12.588
160	0.780	15.210	11.821
170	0.706	12.461	10 956
180	0.631	9.954	9 980
190	0.559	7.812	8.928
200	0 497	6.175	7.907
210	0.447	4.995	6.986
220	0.417	4.347	6.382
230	0.407	4.141	6 171
240	0.418	4.368	6.403
250	0.441	4.862	6.868
260	0.470	5.523	7.421
270	0.497	6 175	7.907
280	0.517	6.682	8.249
290	0.525	6.891	8 383
300	0.517	6.682	8.249
310	0.497	6.175	7.907
320	0.470	5.523	7.421
330	0.442	4.884	6.888
340	0.418	4.368	6.403
350	0.407	4 141	6.171



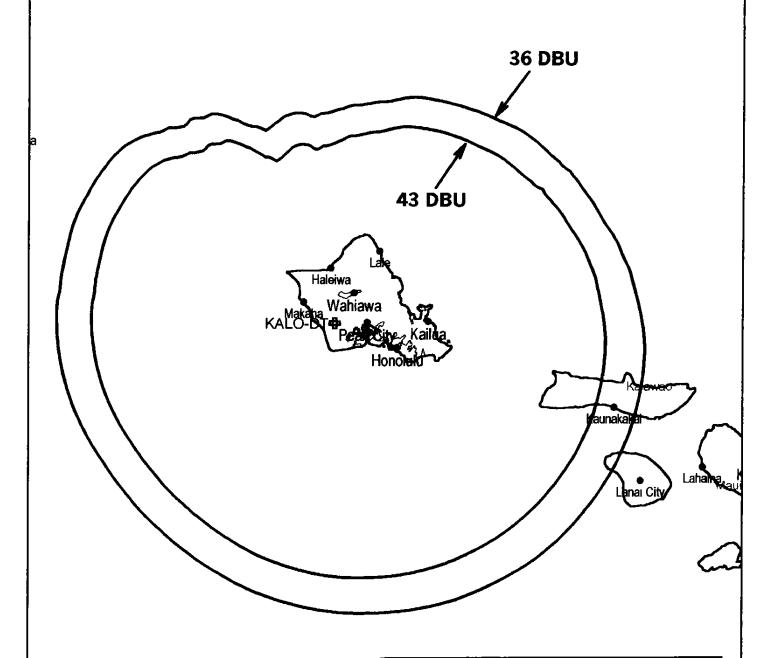
ANDREW CORPORATION 10500 W. 153rd Street Orland Park, Illinois U.S.A 60462 **EXHIBIT C-3** 

**ANTENNA RELATIVE FIELD VALUES** 

PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII

**CONTOUR POPULATION** 

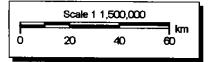
43 DBU: 877,377 36 DBU: 882,468 **SMITH and FISHER** 



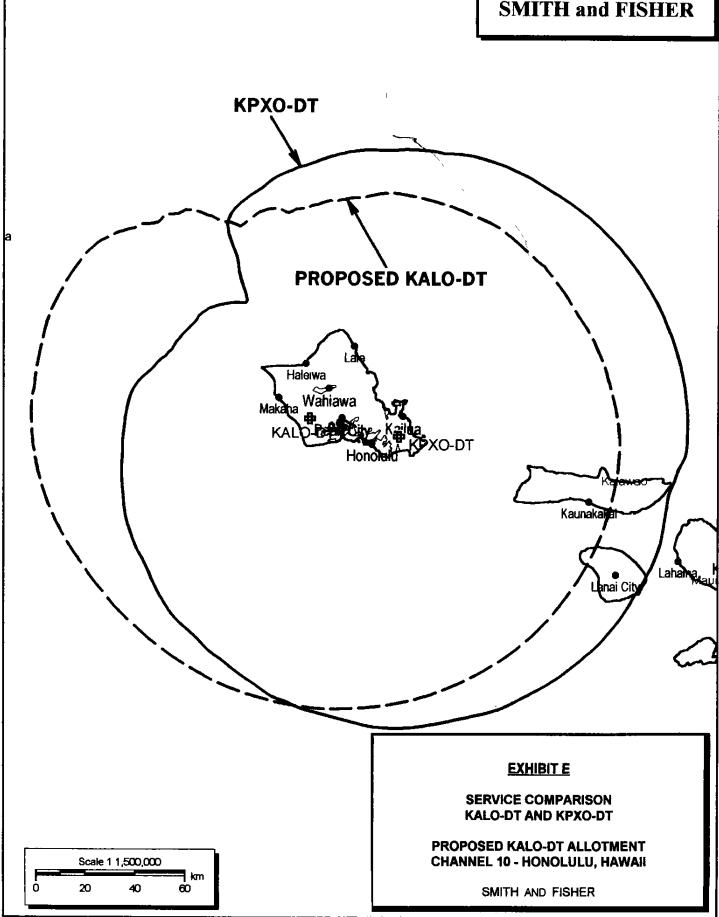
# EXHIBIT D

PREDICTED SERVICE CONTOURS

PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII



# **SMITH and FISHER**



#### INTERFERENCE STUDY

# PROPOSED KALO-DT ALLOTMENT CHANNEL 10 – HONOLULU, HAWAII

An interference study was conducted using the operating parameters of the facility described herein to determine if it meets the FCC's *de minimis* interference requirements of Section 73.623(c)(2) of the Commission's Rules. Specifically, the proposed facility may not cause more than two percent interference to the service population of a DTV or NTSC facility, nor can its interference contribution result in an excess of 10 percent total DTV interference to the service population of any DTV or NTSC facility.

The service area of a NTSC station is defined as that which is calculated using the Longley-Rice propagation model to receive a signal of 56 db $\mu$  or greater and lies within the predicted 56 db $\mu$  contour of the station using the F(50,50) curves, the station's effective radiated power, and 2-10 mile terrain averages along each radial.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe II" computer program, which has been found generally to mimic the FCC's program. Changes in interference caused by the proposed allotment facility to other pertinent stations are tabulated in Exhibit H-2.

As indicated, the proposed allotment would not contribute more than two percent DTV interference to the service population of any potentially affected NTSC or DTV station. In addition, this proposal does not result in any NTSC or DTV station receiving more than ten percent total DTV interference to viewers living within the station's authorized or proposed service area.

## EXHIBIT F-1

Therefore, this proposal meets the FCC's *de minimis* interference standards as defined in Section 73.623(c)(3) of the Commission's Rules.

It is also important to note that, using the same Longley-Rice methodology described above, we have determined that the proposed DTV allotment facility does not cause interference to any authorized Class A LPTV station.

# **EXHIBIT F-2**

#### INTERFERENCE STUDY SUMMARY

# PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII

<u>Call Sign</u>	<u>City, State</u>	<u>CH.</u>	Coverage Population	Interference Population From KALO-DT	<u>%</u>	Total DTV Interference	<u>%</u>	
GMB BLCT-1585	Honolulu, HI	9	746,163	953	0.1	953	0.1	
GMB BPCT-20030530AQF	Honolulu, Hi	9	728,918	3,008	0.4	3,008	0.4	
MEB MLET-154	Wailuka, HI	10	101,123	1,242	1.2	1,242	1.2	
CHET SLET-140	Honolulu, HI	11	731,336	3,008	0.4	3,008	0.4	

#### EXHIBIT G

#### POWER DENSITY CALCULATION

## PROPOSED KALO-DT ALLOTMENT CHANNEL 10 - HONOLULU, HAWAII

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Honolulu facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 25 kw, an effective antenna height of 20 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.042 mw/cm² is calculated to occur 5 meters east-southeast of the base of the tower. This is only 4.2 percent of the 1.0 mw/cm² reference for controlled environments (areas without public access) surrounding a facility operating on Channel 10 (192-198 MHz). It is important to note that the area surrounding the KALO-DT tower is secure from unauthorized access.

If necessary, the licensee will coordinate with other users of the site to conduct studies necessary to determine that the FCC's RF exposure guidelines are met. Therefore, a grant of this proposal may be considered a minor environmental action with respect to public and occupational exposure to ground-level nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.